

Amendments to the Claims:

1. **(Currently amended)** A method for manufacturing semiconductor chip ~~that chips in which~~ a semiconductor wafer, having a surface segmented by streets and formed with a plurality of circuits, is divided into individual circuit-based semiconductor chips, the method comprising:

a support substrate integration step of bonding a front surface of a semiconductor wafer to a light-transmissive support substrate through an adhesive layer having an adhesion force ~~to reduce that is reduced~~ upon ~~exposed exposure~~ to light radiation, thereby exposing a back surface of the semiconductor wafer;

a grinding step of resting the semiconductor wafer integrated with the support substrate on a chuck table of a grinding device and grinding ~~a~~ the back surface of the semiconductor wafer;

after the grinding step, performing a tape bonding step of bonding a tape on the back surface of the semiconductor wafer while the semiconductor wafer is integrated with the support substrate ~~after the grinding step, while and~~ bonding a frame on a periphery of the tape;

after the tape bonding step, performing a re-bonding step of applying light radiation to the adhesive layer from a side of the support substrate ~~before or after the tape bonding step~~ to thereby reduce the adhesion force of the adhesive layer, and removing the support substrate and adhesive layer from the front surface of the semiconductor wafer ~~after the tape bonding step~~ to thereby support the semiconductor wafer by the tape and ~~a~~ the frame; and

a dicing step of resting the semiconductor wafer supported by the tape and the frame on a chuck table of a dicing apparatus and cutting along the streets ~~segmenting for a plurality of circuits into~~ to segment the semiconductor wafer into the individual semiconductor chips.

2. **(Currently amended)** A method for manufacturing semiconductor chip ~~that chips in which~~ a semiconductor wafer, having a surface segmented by streets and formed with a

plurality of circuits, is divided into individual circuit-based semiconductor chips, the method comprising:

a groove forming step of resting a semiconductor wafer on a chuck table of a dicing apparatus and forming grooves ~~on street surface segmenting for a~~ in a front surface of the semiconductor wafer to segment the plurality of circuits;

a support substrate integrating step of bonding ~~a~~ the front surface of the semiconductor wafer to a light-transmissive support substrate through an adhesive layer having an adhesion force ~~to reduce upon exposed~~ that is reduced upon exposure to light radiation, thereby exposing a back surface of the semiconductor wafer;

a grinding step of resting the semiconductor wafer integrated with the support substrate on a chuck table of a grinding apparatus and grinding the back surface of the semiconductor wafer ~~into individual semiconductor chips~~ until the grooves are surfaced exposed through the back surface of the semiconductor wafer to segment the semiconductor wafer into individual semiconductor chips;

after the grinding step, performing a tape bonding step of bonding a tape on the back surface of the semiconductor ~~chip in a state~~ wafer while the semiconductor wafer is integrated with the support substrate ~~of after grinding step~~ and maintaining an outer shape of the semiconductor wafer, and supporting a periphery of the tape by a frame; and

after the tape bonding step, performing a re-bonding step of applying light radiation to the adhesive layer at a side close to the support substrate ~~before or after the tape bonding step~~ thereby reduce an adhesion force of the adhesive layer, and removing the ~~supporting support~~ substrate and adhesive layer from the front surface of the semiconductor wafer ~~after the tape bonding step thereby supporting such that~~ the semiconductor wafer is supported by the tape and the frame.

3. (Cancelled)

4. **(Currently amended)** A method according to claim 1, wherein the support substrate that is bonded to the semiconductor wafer in the support substrate integrating step is ~~carried out using the support substrate having~~ has an outer shape greater than an outer shape of the semiconductor wafer, the grinding step being carried out while measuring a thickness of the semiconductor wafer by contacting probes of a thickness measuring instrument respectively with a grinding surface of the semiconductor wafer and with a surface of the support substrate.

5. **(Currently amended)** A method according to claim 1, wherein the adhesive layer is formed by a liquid resin, the liquid resin being formed of a composition of quinone-diazido compound and resin to foam and reduce in adhesion force upon ~~exposed~~ exposure to ultraviolet radiation, wherein the liquid resin is coated on the surface of the support substrate or the semiconductor wafer.

6. **(Currently amended)** A method according to claim 2, wherein the adhesive layer is formed by a liquid resin, the liquid resin being formed of a composition of quinone-diazido compound and resin to foam and reduce in adhesion force upon ~~exposed~~ exposure to ultraviolet radiation, wherein the liquid resin is coated on the surface of the support substrate or the semiconductor wafer.

7. **(Cancelled)**

8. **(Previously presented)** A method according to claim 5, wherein the quinone-diazido compound is quinone-diazido sulphonic acid ester obtained by reacting polyhydroxy benzophenone, such as tri- or tetra-hydroxy benzophenone, with 1,2-naphtoquinone diazido-5-sulphonic acid, 1,2-naphtoquinone diazido-4-sulphonic acid, or sulphonic acid chloride thereof or the like, or at least one of sulphonic oxide compound selected from 1,2-quinone-diazido sulphonic acid or sulphonic acid chloride thereof or the like.

9. **(Original)** A method according to claim 5, wherein the resin is at least one resin selected from acryl, urethane, polyester, novolak phenol and a derivative thereof, polyvinyl phenol and a derivative thereof, and silicone and a derivative thereof, the resin being introduced with polymeric unsaturated radical.
10. **(Original)** A method according to claim 6, wherein the resin is at least one resin selected from acryl, urethane, polyester, novolak phenol and a derivative thereof, polyvinyl phenol and a derivative thereof, and silicone and a derivative thereof, the resin being introduced with polymeric unsaturated radical.
11. **(Cancelled)**
12. **(Previously presented)** A method according to claim 9, wherein the liquid resin has a viscosity of 10 - 100000 mPa • s.
13. **(Previously presented)** A method according to claim 5, wherein, in the support substrate integrating step, the liquid resin is dripped on the surface of the support substrate or the semiconductor wafer and spin-coated under rotation at 100 - 8000 rpm for 5 seconds or more, and thereafter the semiconductor wafer and the support substrate are united together through the liquid resin and baked at 50 - 150 °C for 30 seconds to 20 minutes.
14. **(Previously presented)** A method according to any of claim 1, wherein the support substrate is formed by a transparent plate of glass or plastic having a thickness of 0.5 - 2.5 mm.
15. **(Currently amended)** A method according to claim 2, wherein the support substrate that is bonded to the semiconductor wafer in the support substrate integrating step is ~~carried out using the support substrate having~~ has an outer shape greater than an outer shape of

the semiconductor wafer, the grinding step being carried out while measuring a thickness of the semiconductor wafer by contacting probes of a thickness measuring instrument respectively with a grinding surface of the semiconductor wafer and with a surface of the support substrate.

16. **(Cancelled)**

17. **(Previously presented)** A method according to claim 6, wherein the quinone-diazido compound is quinone-diazido sulphonic acid ester obtained by reacting polyhydroxy benzophenone, such as tri- or tetra-hydroxy benzophenone, with 1,2-naphtoquinone diazido-5-sulphonic acid, 1,2-naphtoquinone diazido-4- sulphonic acid, or sulphonic acid chloride thereof or the like, or at least one of sulphonic oxide compound selected from 1,2-quinone-diazido sulphonic acid or sulphonic acid chloride thereof or the like.

18. **(Cancelled)**

19. **(Previously presented)** A method according to claim 10, wherein the liquid resin has a viscosity of 10 - 100000 mPa • s.

20. **(Cancelled)**

21. **(Previously presented)** A method according to claim 6, wherein, in the support substrate integrating step, the liquid resin is dripped on the surface of the support substrate or the semiconductor wafer and spin-coated under rotation at 100 - 8000 rpm for 5 seconds or more, and thereafter the semiconductor wafer and the support substrate are united together through the liquid resin and baked at 50 - 150 °C for 30 seconds to 20 minutes.

22. **(Cancelled)**

23. **(Previously presented)** A method according to any of claim 2, wherein the support substrate is formed by a transparent plate of glass or plastic having a thickness of 0.5 - 2.5 mm.

24. **(Cancelled)**